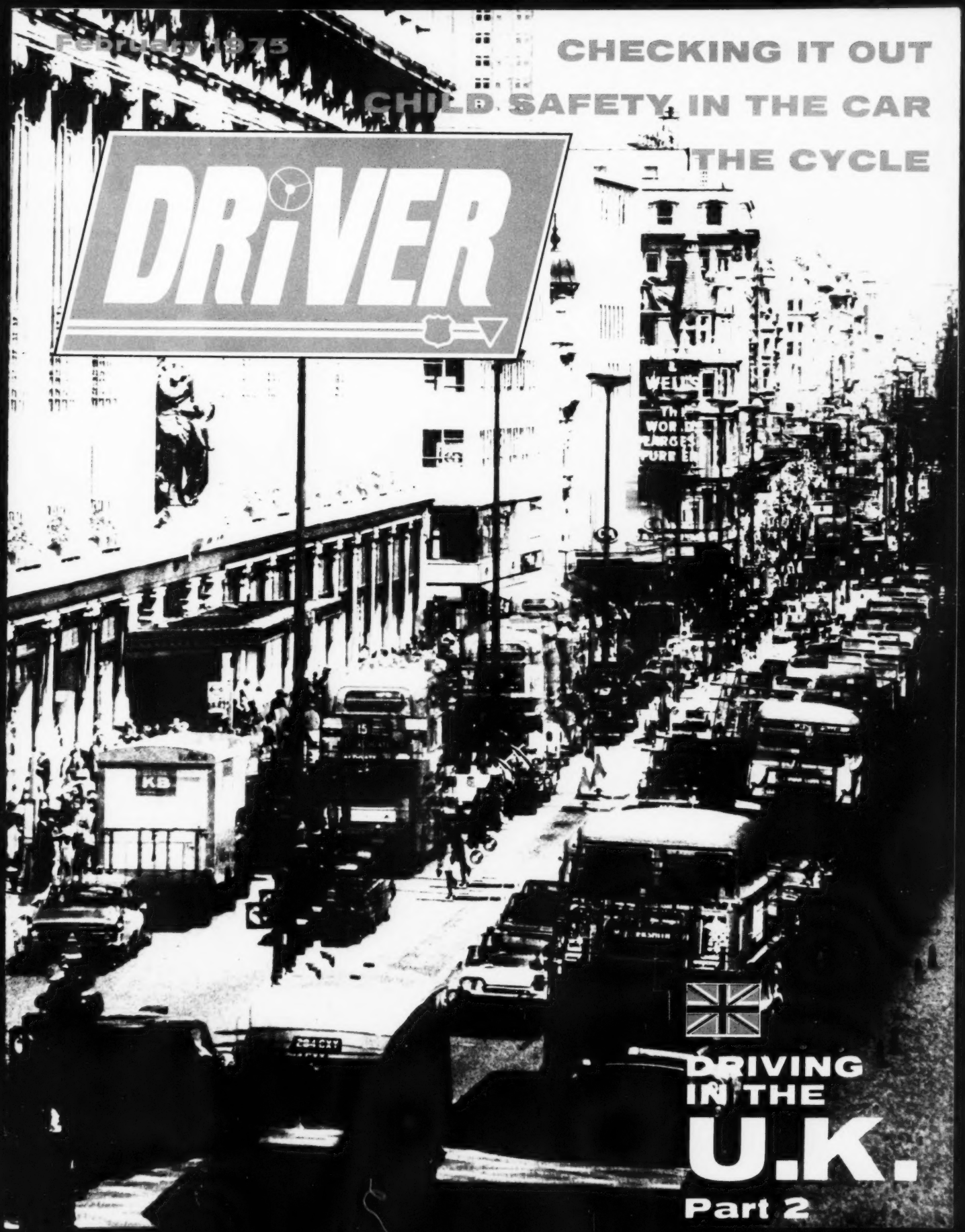
February 1975
CHECKING IT OUT
CHILD SAFETY IN THE CAR
THE CYCLE
DRiVER
DRIVING IN THE U.K.
Part 2

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ARE AMERICANS IN THE U.K. GOOD DRIVERS?

Ask a British Traffic Patrolman!

QUESTION: How do American drivers stack up in the United Kingdom?

Before some wiseacre could guffaw, "Like cordwood!", we decided to follow an old seaman's advice to the effect that if you want the straight skinny, DON'T go to the scuttlebutt. Instead, seek out an authority on the subject.

Armed with a tape recorder SSgt Robert W. Barth, NCOIC of the USAF Driver's School at RAF Mildenhall, located about 75 miles northeasterly of London, did just that for DRIVER. He interviewed Police Constable Alan Hartup of the Bury St. Edmunds Traffic Division of the Suffolk County Constabulary.

A traffic patrolman, PC Hartup is the British version of an American state trooper or motorized traffic officer, except that in England he doesn't carry a sidearm. And don't confuse him or any other traffic officer in the U.K. with a "bobby." That's the nickname applied affectionately to most other British policemen ever since Sir Robert (Bobby) Peel reorganized the London P.D. more than a century ago.

A 10-year police veteran, married, and a father of two children, PC Hartup is a dedicated pro whose advanced training in driving, motor vehicle inspection, and traffic law, coupled with lots of road experience, made him a valuable source for this windup article of DRIVER's two-part spread on driving in the U.K. (Part One was published in the January issue.)

continued

Police Constable Alan Hartup pauses in front of the Suffolk Constabulary at Mildenhall as he departs for a day of traffic patrol duties.

DRIVER

THE TRAFFIC SAFETY MAGAZINE FOR THE MILITARY DRIVER

FEBRUARY 1975

VOLUME 8 NUMBER 9

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THE EDITOR SPEAKS

DOUBLE CLUTCH

HIT AND RUN?

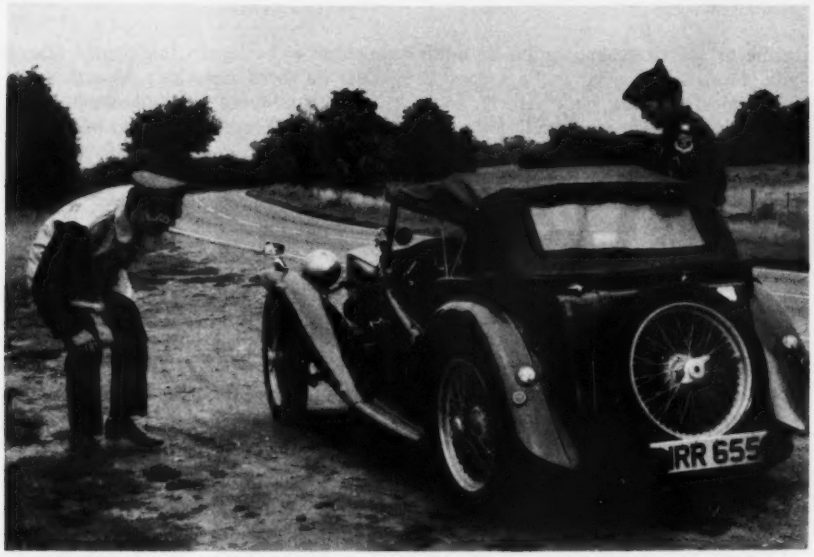
Never leave the scene of an accident in which you have been involved. To do so can be construed as "hit and run" later, even if you maintain you were only going for help.

Traffic accidents, even relatively minor ones, can rattle the calmest people, but the law doesn't accept such an excuse. Losing your cool after an accident can be the biggest mistake you ever made.

If help is needed and you are the only person able to go for it, be certain to leave a clear message behind about who you are, where you are, and when you will return. If there is no one to leave word with at the scene and conditions are critical, write a note. The very best way to protect yourself from possible legal action, however, is to remain on the scene until the police arrive.

If another driver hits you and fails to stop, try to observe the make and color of the vehicle and the license number. Any distinguishable damage to the vehicle is also valuable information. It isn't easy to be so matter-of-fact when the adrenalin is pumping furiously, but a few seconds of careful attention can save you a lot of grief later.

NEXT MONTH
Postgraduate Driving



Air Force Major Fred Hamlin, right, learned that a routine roadworthiness inspection of his 1947 MG-TC by Constable Hartup covers 16 separate functions and items.

Primary traffic patrol car or "incident vehicle" of the Suffolk Constabulary is a versatile, compact, white and fluorescent orange Range Rover. Constable Hartup carries large portable signs inside it to warn motorists of accident situations or traffic snarls ahead.

His responses to our questions should help every American assigned to, living or visiting in England, Northern Ireland, Scotland, or Wales. And at last count Uncle Sam was sending paychecks to some 21,000 GIs, including 17,000 Air Force, 4,000 Navy and Marine Corps, 150 Army, and 30 Coast Guard personnel, who are accompanied by 34,500 dependents.

There are 17 Air Force bases scattered throughout the U.K., five Naval stations, a Coast Guard activities office, the American Embassy in London, and numerous other smaller military detachments and communication sites.

DRIVING ON THE LEFT SIDE?

Drivers new to steering down the left side of a highway do have difficulty in adjusting, PC Hartup said, but generally for a short period only. He explained that instinct and ingrained behavioral patterns frequently complicate attempts to reverse Stateside habits.

Example: An American serviceman tooling along in his sports car on an open road became tired and closed his eyes for a second or two. On opening them he saw he was on the left side of the road and instinctively steered hard to the right and toward oncoming traffic, finally colliding with a lamp standard.

MOST COMMON VIOLATIONS

PC Hartup ticked off the most common traffic violations committed by American drivers as (not necessarily in this order) driving too close to the near side (left) curb, thereby endangering cyclists and pedestrians; tailgating; incorrect positioning before making a right turn; speeding; driving while intoxicated; and driving old cars with mechanical defects ("Servicemen on short tours who buy cheap cars get what the pay for—junk!").

Younger male military personnel and dependents are involved in more speeding violations and one-vehicle accidents where speed is the primary cause, he added.

The most common offense by Yankee motorcyclists is riding without an "L" (learner) license plate before they take their test to obtain a British motorcycling license.

DRIVING AFTER DARK

The patrolman praised Americans for switching on their headlights at dusk.

"This is a lesson the British driver could learn," he readily admitted, stating that many of them drive after dark with only their parking lights aglow, a practice still legal in the U.K. under certain street lighting conditions.

"It may well annoy oncoming drivers,' PC Hartup pointed out, "but it is a good thing as long as your beams are in the 'dipped' or low condition." All left-hand-drive autos, incidentally, are required in the U.K. to have their headlights mechanically changed so the low beams dip to the left side of the road.

GOOD DRIVERS BUT COULD BE BETTER

"In general," the congenial young officer explained, "Americans drive fairly well over here, but they could do even better if they would read *The Highway Code* (6 pence or 15¢ in book stores). Americans frequently notice British drivers doing something wrong, assume it is right, then repeat the violation. If they would read the *Code*, they'd know it was wrong. Driving too close to other vehicles is a good example—British drivers do this too much in some communities."

continued

continued

DRIVING IN THE U.K.

Most Americans don't have too much trouble with British road signs, PC Hartup reported, because signs used in Great Britain are of an international type.

"Lots of drivers are slovenly in their approach to driving—slumped down, driving with one hand or with an arm around their girlfriend, especially on narrow roads," he related.

"Drivers need to adopt a more positive attitude toward driving and not treat a vehicle as a means of just getting from A to B."

Constable Hartup, whose job of patroling the main highways and trunk roads around Bury St. Edmunds is aimed primarily at preventing accidents, firmly believes that the accident problem will be solved only when every person approaches his driving seriously and responsibly.

"Although enforcement may be necessary, 95 per cent of all traffic laws in England were adopted with safety in mind," he emphasized. "Our aim is not to prosecute drivers but to promote a safe driving environment."

WHAT DO I DO IF STOPPED?

In the U.K., a traffic officer may stop a motorist at any time with or without provocation; however, it will normally be for a traffic violation or a mechanical check of your vehicle.

If you have broken a traffic law, he will normally approach your car from the rear, flash his blue light and sound a two-tone hooter (not a siren). He may also use his public address system if necessary. In most instances he will pass you or, if he is driving in front of you, he will pull a cord which operates a blind in the back window of his vehicle reflecting two large words, "STOP. POLICE."

In any event, if you're signaled to stop, steer your vehicle carefully into the left-hand traffic lane (if you're not already in it), slow down, and stop where the police officer indicates. Don't stop dead in the road. You don't have to get out of your car unless requested to do so.

If requested, you must show the officer your driving permit or license, military ID card, certificate of insurance, and "MOT" (Ministry of Transport) vehicle test certificate. If you don't happen to be carrying these documents in your car, you have five days to present them at the police station.

The officer can cite you for a moving traffic or mechanical violation or both, give a simple warning, make a routine mechanical check of your vehicle, and/or administer a drunk driving test.

ROUTINE BUT THOROUGH CHECK

A low-slung 1947 MG-TC driven by Air Force Major Frederick J. Hamlin, a squadron instructor pilot for EC-135Hs of the 10th Airborne Command and Control Squadron at RAF Mildenhall, was pulled over by PC Hartup at *DRIVER's* request. We soon learned just how thoroughly the British conduct a routine traffic check.

Constable Hartup first checked for currency and completeness of each of the aforementioned documents required of all drivers, then gave the vintage sports car classic a mechanical going-over that you seldom get in the States. He inspected headlights, stop lights, turn indicators, brakes (foot and emergency), steering mechanism, windshield wipers and washer, horn, exhaust system, tires, and seat belts. The average check covers at least 16 points.

Major Hamlin passed the inspection with flying colors and a polite compliment on his vehicle's "sharp" looks. However, he could have been reported for mechanical defects resulting in a court appearance or receipt of a written caution, or just a friendly word of warning about an imminent unsafe mechanical condition.

In short, having a U.K. cop stop you for one of these checks is a plus—not a minus!

HAD A BREATHALIZER TEST YET?

If you like to visit a pub on the way home from work, you should know one thing about boozing it up in the U.K. As a driver or pedestrian, it takes less alcohol to be legally intoxicated than it does in 48 of America's 50 states.

The minimum level of alcohol concentration in your blood to be arrested for drunk driving in Britain is .08%, the same as in Idaho and Utah. Most other American states have a .10% cutoff, while some permit a level as high as .15%.

To determine your sobriety as a driver in the U.K., a Breathalizer test is normally administered. This is a simple operation in which you blow air into a plastic bag device similar to blowing up a balloon. Before the test can be required, however, you must have been involved in an accident or moving traffic violation or be suspected of having alcohol in your body.

PC Hartup said he normally invites a tipsy driver to sit in his patrol car while he assembles the Breathalizer kit and conducts the test. If the test is positive (crystals turn green), the driver is placed under arrest and taken in the officer's vehicle to the police station. There, he is given the opportunity to take a second breath test and if it proves negative he will be released. If it is positive, he must also take either a blood or urine test. Should a driver refuse at any point to undergo any of these tests, he commits an additional offense by refusing. If the blood or urine test shows .07% or less, no further action will be taken against the driver and he will be released—but not without some friendly but firm counsel from PC Hartup.

The constable can back up his advice to imbibing GIs with some hard facts from a three-year survey recently concluded in Suffolk County. Of 319 injury-producing accidents in which Breathalizer tests showed one or more drivers to be legally intoxicated, more occurred in the Mildenhall and Woodbridge areas than any other. Both have relatively large American populations.

Of 59 accidents around Mildenhall, PC Hartup disclosed, 40 involved U.S. drivers. In fact, he said, alcohol is a major cause of traffic accidents around U.S. bases in the U.K.

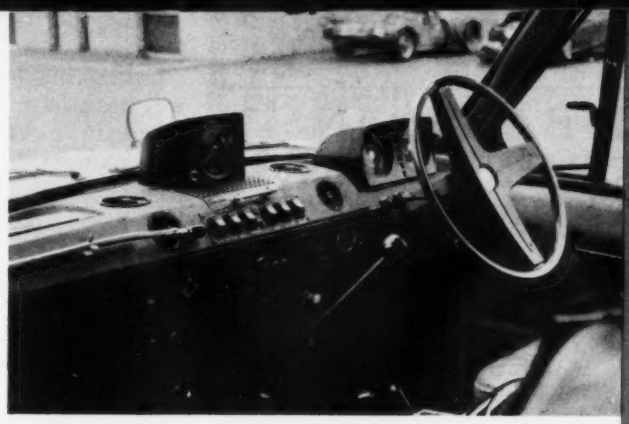
DRUGS AND DRIVING

A person can be arrested in the U.K. for possessing any dangerous drug, and the penalty for driving under the influence of drugs is the same as for driving under the influence of alcohol. Penalties for possessing and/or using drugs will not be covered in this article.

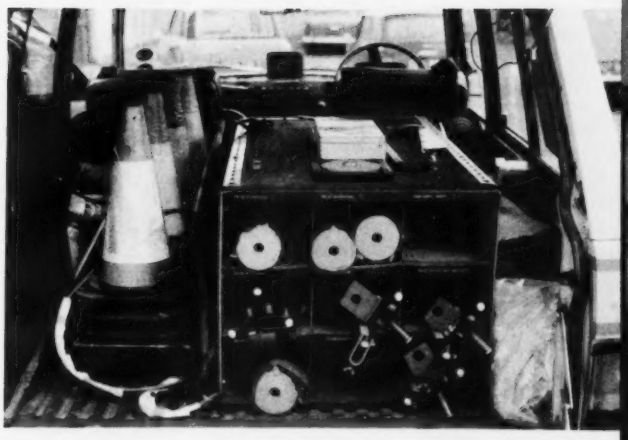
The primary drugs leading to the arrest of motorists in England, PC Hartup reported, are marijuana, LSD, and various amphetamines.

continued

U.K. AND PHOTO CREDITS: Suffolk County Constabulary Headquarters in Ipswich, Mildenhall Constabulary, and Bury St. Edmunds Traffic Division (Chief Supt. K. L. Baker, Inspector George Everson, and PC Alan Hartup); British Consulate and British Tourist Authority, Los Angeles; HQ 3d Air Force (USAFE) Office of Information: HQ 513th Tactical Airlift Wing, RAF Mildenhall — Office of Information (Myles Campbell) and Transportation (MSgt Boyd J. Engleman and SSgt Robert W. Barth); and Audio Visual Services, 48th Combat Support Group, RAF Lakenheath.



Clocking speeders is simplified for Constable Hartup through the use of a large, specially calibrated and certified speedometer mounted atop the instrument panel of his Range Rover.



Special equipment planned and designed to handle traffic and roadside emergencies of all kinds is carefully stored in the aft compartment of the little Range Rover station wagon.

SSgt Bob Barth of RAF Mildenhall simulates being stopped on suspicion of drunken driving and puffs air into a plastic Breathalizer bag to determine if his blood alcohol level is .08 percent or greater. It was a demonstration test for DRIVER, and Constable Hartup happily found it unnecessary to "arrest" the airman.

Auto clubs in the U.K. provide excellent services at bargain rates. Navy Petty Officer Second Class Malcolm W. Tracy, an aviation jet engine mechanic at Naval Air Facility, Mildenhall, checks a map provided by one of the many roadside auto club offices and kiosks (phone booths) and by roving patrol vehicles.

HERE'S ONE BARGAIN MOST U.K. DRIVERS CAN'T AFFORD TO PASS UP

Joining an auto club may be the best bargain of an American GI's entire tour in the U.K. if he owns a car.

Three motoring membership organizations are available: the Automobile Association (AA), Royal Automobile Club (RAC), and Royal Scottish Automobile Club (RSAC). Some have working agreements with auto clubs in the U.S., so a quick check with your Stateside club before shipping over could save you a few bucks.

Membership costs about 5 pounds ($12) per year which includes roadside service and towing of your disabled car to a nearby garage. For approximately 1½ pounds ($3.60) more, you receive a "relay service" enabling you to have your disabled chariot, including driver and possible passenger(s), towed or transported to a garage several hundred miles away.

The going rate for a repairman's or mechanic's labor in most parts of the U.K. was last reported to be about 3 pounds ($7.20) an hour plus parts and materials. On weekends most service stations are open for selling gasoline and oil only—not for repairs.

In addition to competently staffed roadside service centers, the clubs maintain telephone kiosks on major highways. A club member receives a master key to call for help in the event of a breakdown or for information. Kiosks also contain maps and literature, while some are even stocked with cans of gasoline for emergency use (you are entrusted to mail the price of the fuel to a club office later).

Auto clubs also employ roving patrol vehicles with uniformed and trained drivers offering roadside service to members traveling the U.K.'s vast network of major and secondary roads. Reports on current road, weather, and traffic conditions are provided through the kiosk phones and on BBC Radio 1 and 2.

Like most American auto clubs, they also provide all kinds of guidance on recreation, entertainment, lodging, dining, camping, car rentals, and places to visit; auto insurance service; aid in securing vehicle and driver documents; and discount prices on many services. They also sponsor such events as sports car rallies.

WHAT DO YOU DO IN THE U.K. IF YOU AIN'T GOT WHEELS?

Many American military personnel do not or will not be able to own a set of wheels during their sojourn to the British Isles. So what do you do for transportation, Jack?

Fortunately, the high density of Britain's teeming millions and the relatively short distances they can travel in country dictate a variety of economical alternatives to auto or motorcycle ownership or rental.

Fast, comfortable, clean, reasonably priced British Rail trains will speed you from city to city, town to town with only occasional stops between the main centers if you choose "Inter-City" express service.

The world famed express, "Flying Scotsman," will whisk you the 393 miles from London to Edinburgh in 5½ hours, for example.

The suburban train network will get you to one of London's main-line stations from a wide radius of towns on the capital's perimeter, and once in the center the quickest way to travel is on London's excellent underground rail or "tube" system.

If you prefer to see where you're going, hop aboard one of those many big red double decker buses or, for sheer convenience, hail a big black taxi.

Streamlined buses and coaches also will take you from shore to shore and swiftly, too, over the nation's network of motorways. And, if you're in a real hurry, regular air services are operated between major U.K. cities by British Airways and independent airlines.

If you still prefer gasoline alley, then a car rental is probably your bag. Rental agencies abound and rates vary widely according to area, season, length of rental, and choice of vehicle. Drivers must normally be 21 to 65 or 70.

SIGNALING

British drivers generally are courteous and good at taking turns with drivers who don't have the right-of-way. Probably their most frightening habit is changing lanes without signaling—or at least without signaling very much. A flashing turn-signal light on a British vehicle doesn't always mean, "May I please squeeze in your lane?" It may mean, "Here I come, ready or not!" This is an especially frightening habit of trucks on motorways, and newcomers had better be ready for it. Remember, if you hit someone from behind, it is your fault—legally.

CHECK YOUR TYRES . . . BEFORE THE LAW DOES

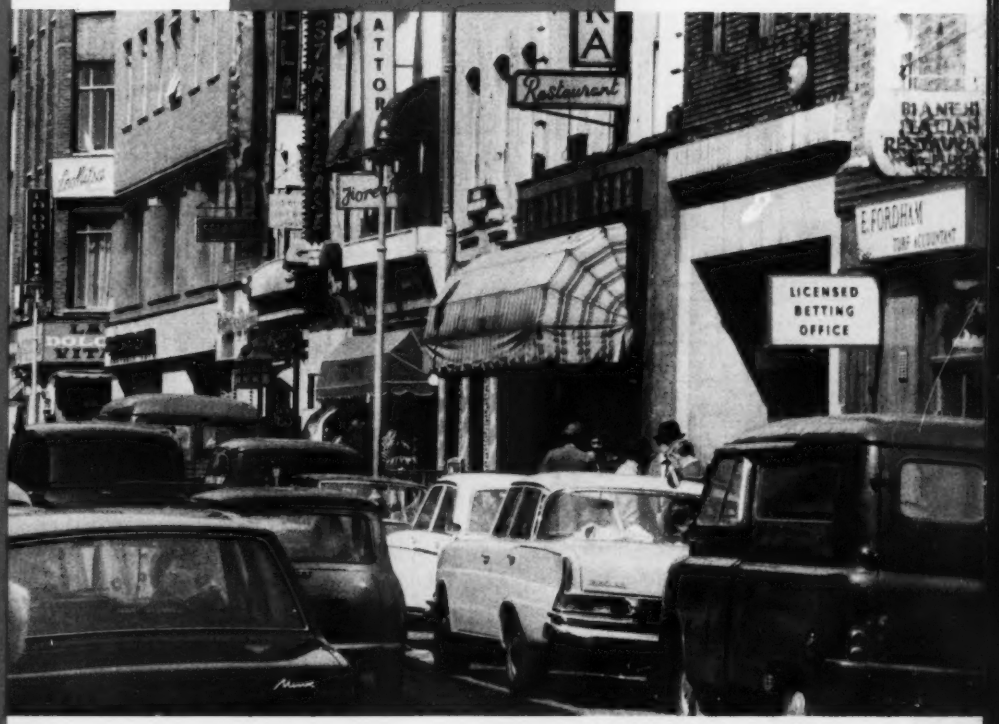
Driving in the U.K. with the wrong combination of radial-ply and cross-ply tyres (tires) is ILLEGAL and subjects the driver to a stiff fine. Vehicle owners in the United States, and other nations which don't have such a federal law, should not wait for similar legislation to learn a lesson from the British.

DO NOT, under any circumstances, the U.K. law says, put radials on the front and cross-plies on the rear, regardless of whether the vehicle has front- or rear-wheel drive, or whether the rear tires are standard or winter-tread cross-plies.

DO NOT mix radials and cross-plies on the same axle.

DO NOT fit radials of any make to the front axle only.

The best combinations are either cross-plies all around or radials all around.



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If you are the parent of a young child, do you know the importance of a special car restraint for him?

Many parents of young children are surprised to hear that the lap/shoulder belt arrangements they rely on to protect themselves in the family car are not suitable—may even be dangerous—for their child.

- A youngster shorter than 4′ 7″ should not use a diagonal shoulder belt (worn only with a lap belt) because the belt can slide up over the neck or face in a collision.
- A child weighing less than 40 pounds can be injured by an adult lap belt under crash loads because his pelvic structure is not yet developed sufficiently to protect internal organs.
- Kiddie car seats, papoose boards and padded baby seats—all those things we think of as child protectors—are totally inadequate in the car and will actually increase the danger to your child in a collision.

HARD TO FIND

Motor vehicle accidents are *the leading cause of death* for children. Despite this fact, the concerned parent will not find it easy to locate a proper child restraint. DRIVER surveyed auto dealers, major department stores and auto supply stores in a city of 125,000 population with disappointing results: one new-car dealer had a top-rated seat on display, not in the showroom but out back in the parts department. Other car dealers had none in stock but assured us that they could order a child restraint from a metropolitan area about 60 miles away. However, it would take several days and would mean another trip downtown for us to pick it up.

Only one large department store had any child restraints. No auto supply store had any or could offer advice as to where we might be able to buy one. We found an approved seat in a well-known mail order catalog. Again, a wait is involved. Cost of the few seats we were able to track down

continued

CHILD SAFETY IN THE CAR

This child restraint surrounds a child's body and thighs and consists of three components: a 5½-pound hollow-molded polyethylene shield, a 3-inch high polyethylene seat, and a removable foam pad for the inside of the shield. It is secured by the conventional lap belt or the safety belt interlock system. With the latter, the nondetachable shoulder harness is placed around the front and underneath the brow of the child restraint.

Children often resent being confined and may resist using a child restraint in the car. Let the child play with the device for a while in the house before you begin to use it in the car. He will be less likely to reject it.

For infants under 9 months, a padded bed or carrier with net or straps over the top, deep enough to keep the baby from being thrown out in case of a sudden stop or crash. Carrier and infant should face **backward** for maximum protection. Car beds and infant carriers are not covered by federal standards yet, but will be soon.

From 9 months to 4 or 5 years, the child should be protected by a special restraint, either harness or seat types. When shopping, read labels. The date of manufacture will be shown. If it is April 1, 1971, or later, it is an approved design (meets Federal Standard 213).

For children over 4 years of age, or over 4′ 7″ tall, a regular seat belt, pulled firmly around the hips.

averaged about $30. This kind of shopping obviously takes a lot of knowledge and determination on the part of the parent.

The situation actually may not be as gloomy as it appears, however. Until the U.S. Department of Transportation issued the first federal standard for child seating systems in 1971, a child's "car seat" could be purchased almost anywhere. Now, four years later, it may be hard to find an approved seat but at least the dangerous ones are no longer around. In fact, it is illegal to sell any seat manufactured after April 1971 which does not meet Safety Standard No. 213.

Most deadly of the old ones was the kind that hooked over the back of the seat and had a make-believe steering wheel. Be sure not to put your child in one of those. If you find one in grandma's attic or receive a hand-me-down from a friend whose childen are fortunate enough to have outgrown it, throw it in the trash.

CHILDREN ARE VULNERABLE

If by now you are beginning to think that purchase of an item so relatively difficult to find and so expensive may be postponed, let's review some facts. In the last 10 years, more than 10,000 children under the age of four were killed in automobile crashes. Almost all of these children died because, at the moment of crash, they had no restraint to prevent them from turning into small human projectiles inside the car's passenger compartment.

Many of these children were riding in so-called "car safety seats," or had parents who believed they could do something to protect the child when they saw an accident coming. Careful road tests have proved that most accidents start and end in three seconds or less.

Some intelligent and concerned parents honestly think they can steer with one hand while using the other to hold the child back from a windshield in a crash. But even in a 20-mile-per-hour collision, a small child becomes an enormous force. When a car stops suddenly, its passengers keep going in the same direction and at the same speed the car has been traveling. In a 20 mph collision, therefore, a 30-pound child could in effect weigh 600 pounds. In a 30 mph collision, he could weigh nearly ¾s of a ton. That's an impossible force for anyone to hold back with one arm.

Also, small children are top heavy. Proportionately their heads are heavier than adults' heads and, in a collision, this weight can throw enormous strain on a child's spine. It used to be thought that because babies were "soft and pliable" they could survive accidents better than adults. Doctors have found this is not true. In fact, much of the public insistence on better protection for children has come from the medical profession. Pediatricians and orthopedic surgeons were perhaps the first to realize how young children were being victimized by traffic accidents.

NEW STANDARD COMING

When the Department of Transportation issued Standard 213 in 1971, it was assumed that a flood of child restraint devices meeting the requirements would soon appear on the market. The fact that this has not been the case may in part be because DOT announced last year that it would upgrade the standards about September 1975.

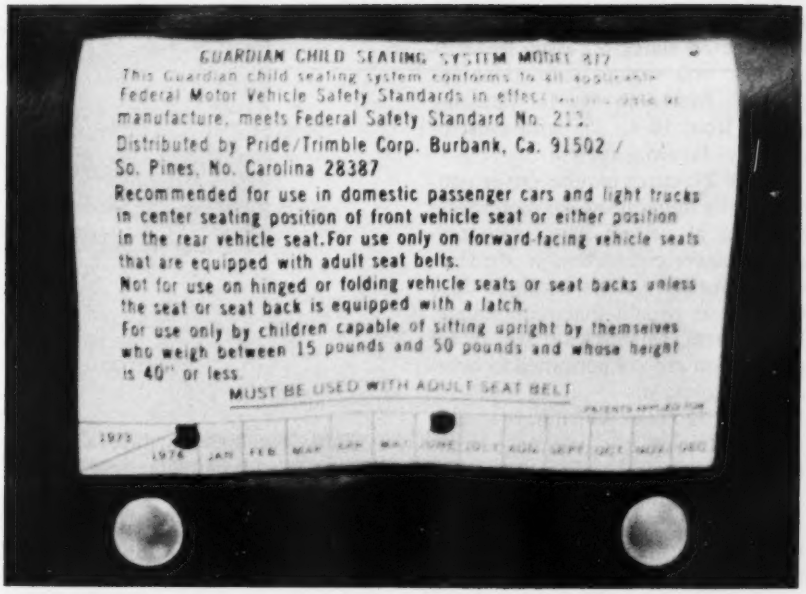
The present standard requires that each child restraint device must undergo tests involving forces applied while it remains stationary (commonly called static testing). Many doctors and other experts felt that the Standard was not tough enough and should call for dynamic testing, simulating actual crash conditions. Dynamic testing uses impact sleds holding auto seats on which dummy occupants are positioned in restraint devices. The sleds are slammed into barriers at varying speeds.

Although the tougher Standard is not yet in effect, a number of child restraint devices already have been tested dynamically by their manufacturers. When you are shopping, read labels carefully.

Personnel at the DOT are concerned about the price of child restraints. They don't want to overregulate with too severe requirements and so drive the price beyond reach. On the other hand, price is a relative thing. Most child restraints still cost less than half the price of the car radio.

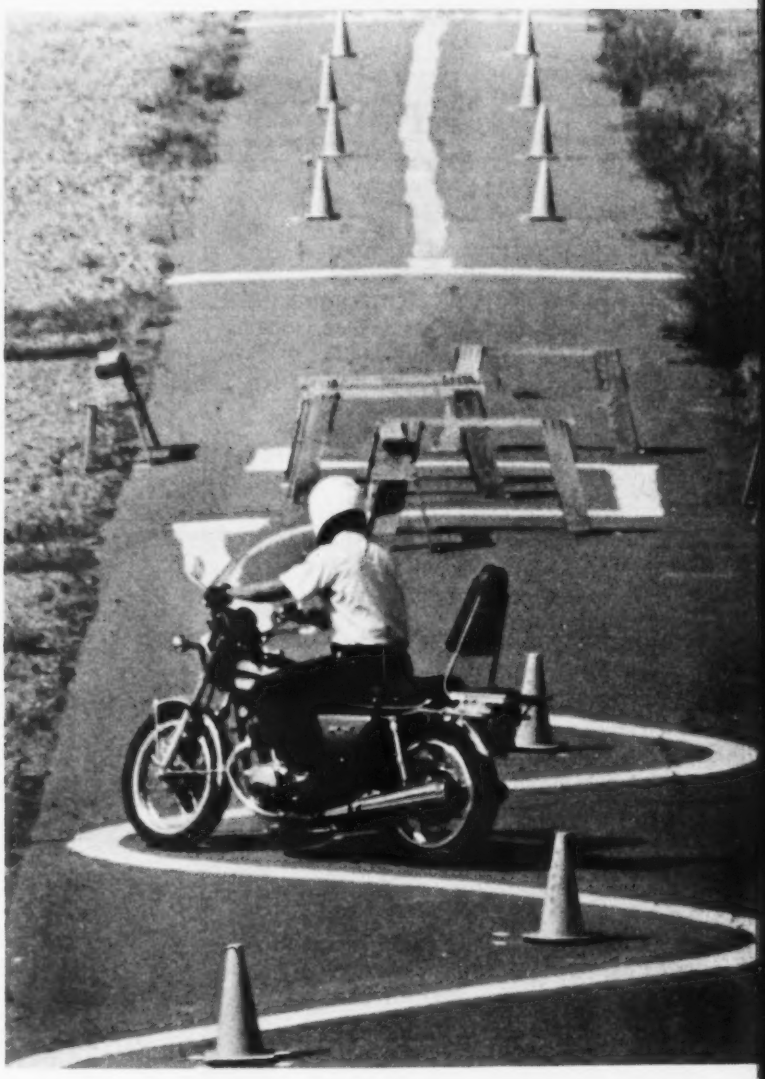
USE IT!

Once you have acquired a proper restraint for your toddler, be sure he uses it every time he is in a car. No one can deny that putting a child into and out of this special equipment is a little bit of trouble, and if the child rides in more than one car it can be bothersome moving his special seat in and out. But after a few weeks the whole thing will become a habit. The child will be perfectly comfortable—may even enjoy napping in his special place—and parents can devote their full attention to the driving task with real peace of mind.


GUARDIAN CHILD SEATING SYSTEM MODEL 317
This Guardian child seating system conforms to all applicable
Federal Motor Vehicle Safety Standards in effect
manufacture, meets Federal Safety Standard No. 213.
Distributed by Pride/Trimble Corp. Burbank, Ca. 91502 /
So. Pines, No. Carolina 28387
Recommended for use in domestic passenger cars and light trucks
in center seating position of front vehicle seat or either position
in the rear vehicle seat. For use only on forward-facing vehicle seats
that are equipped with adult seat belts.
Not for use on hinged or folding vehicle seats or seat backs unless
the seat or seat back is equipped with a latch.
For use only by children capable of sitting upright by themselves
who weigh between 15 pounds and 50 pounds and whose height
is 40" or less.
MUST BE USED WITH ADULT SEAT BELT

Read labels carefully. They tell you weight and height of the child seat is designed for, when seat was manufactured, where and how it should be placed in car. This one is not to be used in vehicle with folding seat back unless seat back is equipped with latch to prevent folding.

If you ride a cycle, it is your legal responsibility to obtain a license if your state requires one



As motorcycles continue to increase in popularity, more states are instituting some form of special licensing for cyclists.

The Motorcycle Safety Foundation recently sponsored a survey to see exactly where the nation now stands on this licensing matter. As shown on the map, 38 states (the District of Columbia is considered a state for this study) now have special licensing procedures for motorcycle operators. Of these 38 states, 27 issue learner's permits, with various restrictions applicable. Minimum age for licensing ranges from 14 to 17, with most of the states favoring age 16.

While 21 states require driver education as a prerequisite for motorcycle licensing at certain ages, only two states require completion of a motorcycle education course with a third state about to add that requirement. In one state, persons with arm or leg amputation are not permitted to operate a motorcycle.

Of the 38 states which have special licenses for cyclists, all have some form of operator testing. Most administer an in-traffic test. The distance covered ranges from under one mile to eight miles. In about half the states the test is monitored by an examiner following by car or motorcycle, and in about half the examiner observes the cyclist from a stationary point.

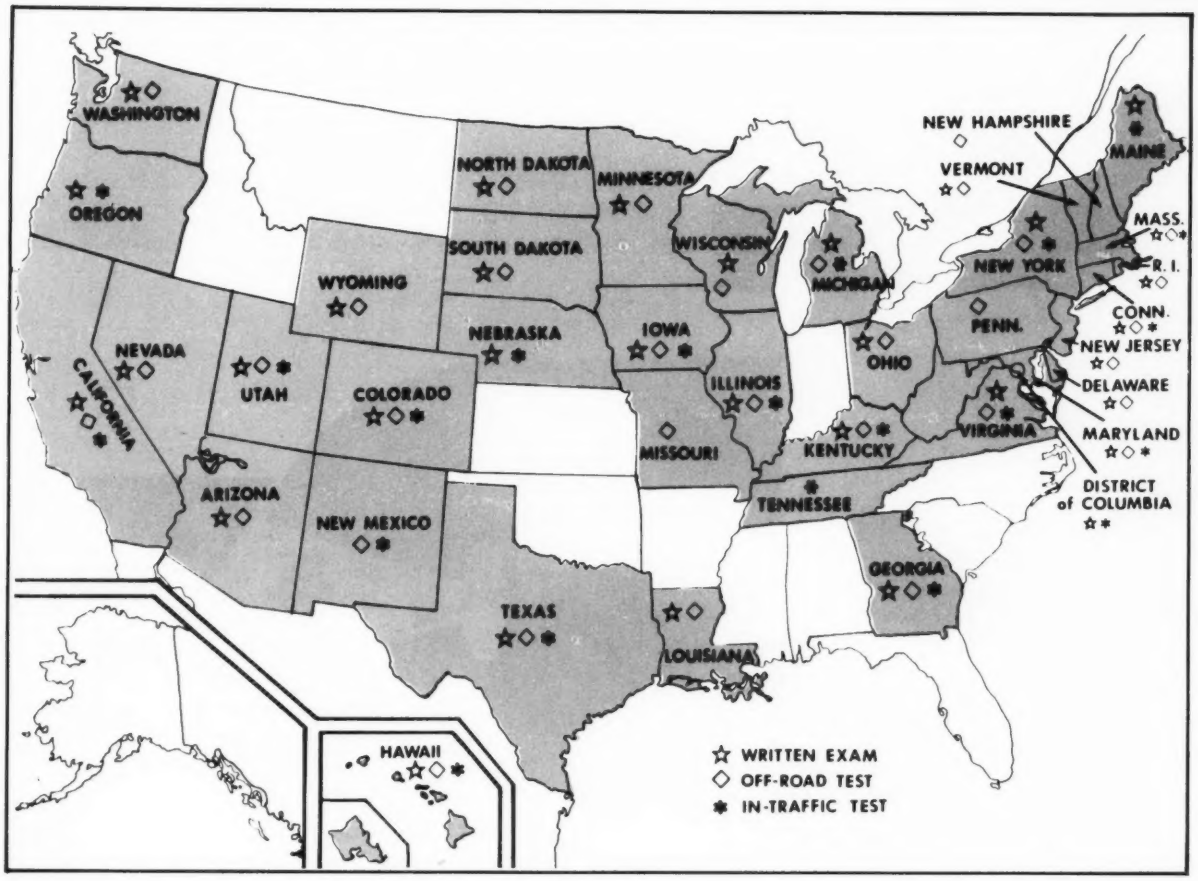
Thirty-three states administer a special written examination. Most of these use only mutiple choice questions. All 33 administer an off-the-road skill test.

Thirty-two states include a vehicle inspection as part of the test, and 32 include an inspection of rider protective gear.

Among the 33 states that have off-the-road skill tests, there is great variation in the size and complexity of the test course. Most states use either a blacktop surface, or a combination of blacktop and concrete. Most states do *not* have a portion of grooved pavement, a simulated railroad crossing, or a slippery or wet surface. Most states do *not* routinely include an incline for starting and stopping. No state uses simulators in conjunction with the skill test.

In all 33 states with off-the-road skill tests, the applicant must demonstrate his skill at performing such maneuvers as: identification of controls, starting performance, getting the cycle under way, stopping performance, straight line ride, serpentine ride, figure 8, funnel "T," fast stops, and obstacle course.

In 21 states periodic reexamination is required on some or all portions of the motorcycle test. The vision test is the most frequent requirement. Eight



LICENSING MOTORCYCLISTS

states require reexamination on the written test, three on the skill test, and only two on the in-traffic test.

Failure percentages on the motorcycle examination vary greatly from state to state, ranging from 1.5 to 55.8 per cent.

In 20 states there are certain limitations applying to retaking some or all portions of the test following a failure. There may be a restriction on the number of times a portion of the test may be taken and/or on the length of time an applicant must wait before retaking the test.

In 33 states the examiners receive some special training to administer the test. The most usual type of instruction is on-the-job training, with written instructions the next most frequent. Seventeen states conduct special workshops. Most states use a combination of these procedures, and only a few states require the examiner to be an experienced motorcyclist.

Of the 38 states with special motorcycle licensing, 25 practice at least some reciprocity with other states. Reciprocity is practiced more frequently in regard to the off-road skills test and the in-traffic test rather than the written examination.

Seven states provide motorcycle applicants with special information other than the written operator's manual. New Jersey is the only state offering film presentations. Four other states provide special literature.

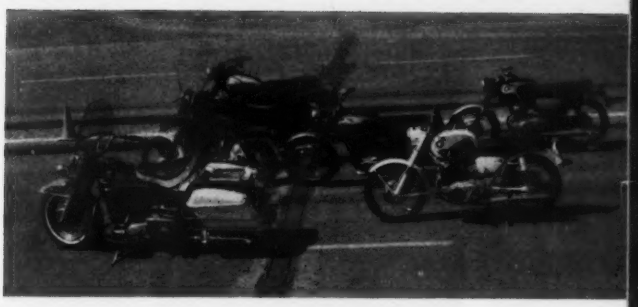
With all this, it's easy to see why the Air Force is so vigorously engaged in its own uniform program of training and licensing motorcycle riders

*(From **Traffic Safety**, a National Safety Council publication)*

A NEW RIDER FINDS HE'S IN FOR SOME SURPRISES

the cy

I felt pretty good. I had wanted a motorcycle for years but always found reasons for not buying one. Finally I decided I wouldn't put it off any longer. I didn't want to look back years from now and tell myself, "Why didn't you get a cycle while you were still young and able to handle it?" So I bought a used cycle from a friend. The year-old CB 350 was in fine condition, had only 1800 miles on it, and had cost me $620! Now the cycle purred contentedly beneath me.



ycle

by
Lt R. L. Rinker, USN

The two-mile ride home was a study in caution; I wasn't about to take any chances on my maiden ride! On the relatively safe street where I lived, I familiarized myself with the cycle's handling characteristics, paying special attention to turns, maneuverability and gravel on the road.

I had always been leery of motorcycles. Everyone I talked to said that cycles were dangerous and that only suicide-bent thrill-seekers would ride them. I had studied considerable motorcycle facts and specifications. I

continued

SUZUKI

knew that most cycle accidents occur in the first 6 months of a rider's experience and within 5 miles of home. I knew that in collisions between motorcycles and automobiles, the auto driver is more often guilty of a traffic violation than the cyclist, usually because "I just didn't see the cycle in time." As a matter of fact, my head was *crammed* with motorcycle safety data.

I went through a motorcycle safety program near the Naval Safety Center at the Naval Air Station, Norfolk, Virginia, as soon as I could get into a class. The classroom discussion and movies were interesting enough, but the *real* eye-opener was the cycle skill arena.

There was a serpentine slalom course, complete with a double figure eight and a tight-turning circle. The object was to go through the course without knocking down any pylons. Priding myself on natural athletic ability and a scientific approach, I confidently took my turn. Hmmm, it was more difficult to go slow with control than I had thought. By the time I had reached the end, my confidence had turned to ashes. With chagrin I surveyed several tipped pylons.

There was a foot-wide lane which we were to drive within. At the end of the lane we were to stop and walk the bike through two sharp-angle turns. Next came the decleration lane: a hard, straight stop from 20 mph using only the rear brake; then at 30 mph using *both* brakes. On the second run, one man fell with his bike when he turned his handlebars. It's surprising how much only 10 mph more speed can change your control problems!

Then came the "slow race," a 100-foot course we were to complete as slowly as possible without putting our feet on the ground. Naturally, one man failed to get the word and burned rubber to the finish line. Finally, we followed a course over rough ground, gravel and railroad tracks to finish the program. It sure gave me valuable insight into my own limitations as well as the bike's.

It became apparent to me in the first week of riding on the streets that many drivers just had motorcycles tuned out of their world. Once I stopped in the middle of a left-turn lane with my turn signal on, waiting for the traffic light to change. A luxury sedan eased around on the right, between lanes, nosed in front of me, and also flipped his left-turn signal on. As we waited for the light to change, I rolled up beside the elderly couple and informed them that a cycle deserves as much lane room as did their car. The driver looked surprised and shocked, as if the cycle had just materialized out of thin air.

Then there is the motorist who feels he is being very benevolent in allow-

continued

ing a cyclist to use *his* road. I stopped at an intersection at a stop light in the left tire track of the far right lane. A small foreign car, loaded to the Plimsoll line with humanity, abruptly squeezed between the curb and my cycle. Leaning over a foot to look into the driver's window, I asked him if he was in a hurry.

"What's the matter, don't you have enough room?" retorted the driver.

"Sure, but I prefer to abide by the law," I replied. "Don't you?"

The driver, embarrassed in front of his family by his hasty act, mumbled an apology and backed up.

Then I met the careless driver who just plain doesn't care about anyone else. I was driving about 30 mph on a street where there was only one well-traveled lane in each direction and cars were diagonally parked. Suddenly, one car spun his tires and backed out in front of me. There was nowhere to go so I laid my bike down to avoid hitting him. Without even checking to see if I was okay, he tore off down the street.

Yes, my first week of cycling was really a revelation. I found I was more conscious of speed on the cycle than I was in my car. I generally kept about 5 mph below the speed limit and *enjoyed* it. Meanwhile, I was the slowest thing on the road, since most traffic went 5 to 10 mph *over* the speed limit. The week before, *I* had been part of that maddening crowd, competing with every other bumper on the road to get a little ahead of the other guy. *Rush* to work each morning; *rush* home each night. We are a nation of competitive drivers! It seems no one wants to give anyone else the benefit of a doubt, let alone an extra inch of driving space. But motorcyclists *have* to, due to their extreme vulnerability as compared to a car. "Defensive cycling" takes on much more meaning than "defensive driving" when you compare a 4000-pound car to a 300-pound motorcycle.

After my experience on the road, the National Safety Council's collection of motorcycle facts *really* impressed me as a beginning rider. One of the best is the idea that good motorcycle riders should always imagine themselves to be "invisible" to other traffic. A rider who constantly thinks of himself and his machine as being invisible will never put himself in a position where his safety is dependent on the driving performance of other people. He will make himself more visible by riding with his headlight on at all times, wearing brightly-colored, reflective clothing, and generally riding in the left wheel track areas of the traffic lane.

Another good tip for the new cyclist is to maintain a speed safe for conditions that is within his own capabilities. Proper adjustment of speed for weather and road surface is of special importance since the motorcycle's design makes it extremely unsteady on slippery or rough surfaces.

Before a cyclist can effectively adapt to adverse riding conditions, he must be familiar with his machine, know proper riding techniques, and be able to respond to hazards instinctively and with a high level of skill. For example, the motorcyclist must know how to brake safely on both dry and wet surfaces, applying both brakes together and applying the front brake more heavily when the pavement is dry. However, he should be aware of the danger of skidding caused by locking the front wheel on a slippery or rough road surface.

The rider should recognize the value of protective apparel such as helmets and eye protection. These can prevent injury and possible loss of control resulting from being struck by airborne objects. Motorcyclists should also wear boots, gloves, and sturdy jackets and pants to protect against abrasions in case of a spill.

Compared with a 59% increase in all motor vehicles (from 1961 to 1972) motorcycle registrations have increased 536%! Percentagewise, motorcycles had fewer accidents reported than cars. However, a large percentage of cyclists were using the cycle only the first or second time when they had the accident, and most cyclists in accidents had had no formal instructions in motorcycle operation. Obviously, more effort in the areas of training and licensing cyclists is needed.

Well, *my* first week on a motorcycle was really eye-opening for me, both in terms of the actual riding episodes experienced and the facts I learned by studying safety literature. To those of you who are contemplating buying a motorcycle, I say sure, it's great fun, and you can't ignore the economy of 60 miles per gallon (or more). But learn all you can about your cycling chances *before* your first accident. That way, you may never have it.

Lieutenant Ronald L. Rinker is Assistant Head of the Surface Ship Systems Safety Branch of the Naval Safety Center at the Naval Air Station, Norfolk, Virginia. He has been a motorcyclist since July 1973.

continued from page 7

DRIVING IN THE U.K.

Opinions ON DRIVING IN THE U.K.

1st Lt Michael J. Tweedy, USAF

C-141 Navigator, 20th Mil Alft Sqdn, 437th MAWg (MAC) at Charleston AFB, SC

Hometown: Torrance, CA

"When I've been TDY to Mildenhall, I found it easy to get around on the buses and subways. Those double-decker buses are neat—I think they ought to get them over here."

CMSgt Ed H. Johnston, USAF

Sergeant Major, AF Inspection & Safety Center at Norton AFB, CA

Hometown: Gibbsboro, NJ

"I had just driven across Europe with my wife and two children on a vacation to England. We took the ferry over the Channel from France, landing in Dover. Never having driven in England before, I was meticulous in being careful to drive on the left side and I did OK. We checked into a Dover hotel, got directions to a nearby restaurant and decided to walk instead of drive. We all walked outside the hotel to cross the street. I looked to the left for oncoming cars, stepped off the curb and nearly wiped out my entire family! I had forgotten to look to the right for oncoming traffic instead of the left."

Col James E. Poore, USAF

Cmdr, 513th Tactical Airlift Wing (USAFE) RAF Mildenhall, Suffolk, England

Hometown: Sullivans Island, SC

"We recently had only three hours to go to complete a 49-day reportable accident-free period and earn a day off. At approximately 2300, one of our Mildenhall airmen failed to negotiate a curve on the Tuddenham Road, hit a telephone pole and overturned. As too often is the case, alcohol was involved. The airman was seriously injured and a military passenger was also hospitalized. The real tragedy here was that a British civilian female passenger was killed.

"I brief all newcomers and rotation personnel to the effect, 'If you persist in driving your car in England at the same rate of speed that you are accustomed to on the interstates in the U.S., you are eventually going to injure or kill yourself or someone else.' Living with the thought that someone whose life was in your hands as a passenger in your car is now dead cannot be pleasant."

Sgt Stephen O. Jensen, USAF

Machine Room Supervisor, 625th Mil Alft Sqdn (MAC) at Torrejon AB, Spain

Hometown: Palmdale, CA

"I lived in England for two years as a missionary for my church before joining the Air Force, and I traveled around the villages from early morning until late evening. I started off on a bicycle and rode for six months before driving a car. Learning England's traffic rules is a lot better on a bike because it not only lets you get used to driving on the left, it also makes you aware that the left turns are the easy ones to make and the right turns are the ones you have to watch out for. It also lets you get used to the different road signs.

"When you're driving a car in the cities, you really have to look out for the signs because they aren't posted far enough in advance. You have to drive slower, especially when you're approaching a roundabout. Driving in London is like any other big city—you've got to watch out for the other guy as well as yourself. When I went back to England on a short visit, I found it easier to take the trains than to rent a car, but this might not be the case if you're staying two or three weeks.

"If you're a civilian taking the British driving test, you can't turn the steering wheel hand over hand like we do in America. You must turn it by slipping it through your hands in the 10 til 2:00 position. Also on the test, when you come to any stop, you must engage the emergency hand brake."

MSgt John R. Carlson, USAF

Pararescueman, 67th Air Rescue & Recovery Sqdn at Woodbridge, England

Hometown: Elmhurst, IL

(MSgt Carlson has been at Woodbridge for over a year, served 2½ years in Scotland in the mid-60s where he met his wife, and has two children. He owns and drives a '72 Hornet Sportabout 4000 cc and a '65 British Ford Anglia Estate 1200 cc.)

"My opinion is that the U.S. Government should give service people stationed in the U.K. an additional allowance or an income tax break to cover all those extra road taxes charged by the British. They charge me about 25 pounds per car in road taxes or about $70 per year for two cars.

"They (the British) have cars with engines of only 1500 to 2000 cc, which makes more sense. They get better performance than cars built in the U.S.

"I think they do a lot more tailgating than we do. They have very high standards for a driver's license but once a driver gets it, he forgets the standards.

"England has good traffic officers, but they can't cover the roads like ours do in the States. They just don't have as many."

TSgt Doidge built his race car from two Mk I Austin Healey Sprites he paid $75 for in 1970.

When Douglas J. Doidge raced a very tired MG-TD one time in Florida in the late fifties, he knew the bug had bitten him. But it was six long years before he tried it again. By then he was stationed in central Texas and had an ancient Porsche Coupe he drove in autocrosses and hillclimbs. But he wanted to take part in fender-to-fender racing and found the Porsche a bit of a strain on the budget, so he bought an MGA and attended his first Sports Car Club of America (SCCA) driver's school.

The MGA was a safe and reliable race car but not extensively prepared and not very fast. Doug's goal was to finish, even in last place, rather than to DNF (Did Not Finish) during those novice races.

The MGA met its end in Canada, where Doug occasionally raced in 1966 while he was stationed in North Dakota. A first-turn, first-lap encounter with a spinning formula car ended the MGA's racing career and convinced its owner that the SCCA was smart to ban mixing open-wheel formula cars in the same race with closed-wheel production cars.

After a tour in Vietnam, Doug found himself back in Texas and in 1970 he bought two Mk I Austin Healey Sprites for $75 and began the process of making one silk purse race car out of two wrecked sows' ears! He built the car with safety and reliability as primary objectives because "in order to win the race you have to finish!"

After another tour in the Far East, he's back in Texas and has just finished first in Class H-Production in a regional race, and in five national races he finished fourth in his class three times. He felt his reliability record wasn't the best, but it was good enough to place him fourth in his class in the Southwest Division and to earn him an invitation to the Champion Spark Plug Road Racing Championship in Atlanta last November. He decided to pass up Atlanta and concentrate on car improvements with the hope of having a really good year in '75.

Ed Note: DRIVER has always been your magazine. But you, the reader, can make it even more your mag. Here's how. There's a lot going on out there that we don't know about—but you do. So we're doing this thing called "In the DRIVER's Seat." Its purpose—for you to let us and everyone else know what's happening.

If you've done something unique in the way of autosports, safety or in any area of interest to DRIVER readers, or know someone who has, let us know. We'd like to put one of you "in the DRIVER's seat" every month. Send your nominations for "In the DRIVER's Seat" to Editor, DRIVER Magazine, AFISC/SEDD, Norton AFB CA 92409.

TSGT DOUGLAS J. DOIDGE

USAF

In the Driver's Seat

A quick inspection at home saves time, money and hassle

CHECKING IT OUT

A fairly close look at your car about every six months makes a lot of sense.. Number one, frequent inspections can save you money by exposing necessary repairs before they become big, expensive problems. And number two, it's good to know that your car is in top condition and that it will get you where you're going safely.

Well, a pretty thorough inspection can be carried out at home in about an hour without any special tools or equipment. And if you pick a nice day it can be kind of fun. Or you can pick a lousy day and do it in your garage in which case you haven't lost anything. Anyway just grab your own-

ers manual and/or a service manual and you're all set to go.

LIGHTS

Begin with a simple walk-around inspection—noting obvious problems such as a loose license plate or missing tire valve caps. Flip on the lights and check for burned out headlights (both bright and dim), parking lights, and taillights. Try the turn signals—if they don't blink and the bulbs are not burned-out, the flasher is probably faulty. The flasher unit on most cars is a small metal canister that plugs in under the dash. Your manual shows the location of this inexpensive unit if you have trouble finding it. Hit the brake pedal a few times to be sure both brakelights operate. If a buddy is not available to help you, look for the reflection against a garage door to check the brakelights. Don't forget to put the car in reverse and check for burned-out back-up lights.

Replacement light bulbs and headlamps are available at most discount and auto stores. Burned-out bulbs can be replaced by removing the screws from the outer lens (see picture). Sometimes the bulb must be reached from under the body, as in the case of body side lights. Tail and back-up lights may be accessible from the trunk.

Headlights are equally easy to replace; but be sure to get the proper lamp. On a dual system (four headlights) there is a separate lamp for dim and for bright—note which lamp you need. On a single unit system (two headlights), where both bright and dim beams are in a single lamp, it's not quite so confusing—but you still have to get the proper lamp for your car. If you're unsure, take the old lamp with you when you go for a new one.

A burned out headlight is replaced by removing the outer trim and loosening the lamp retaining screws (located around the edge of the lamp). Pull the wire connector plug loose from the back of the lamp, and you're ready to install the new light.

HEADLIGHT AIM

You'll probably need to align your headlights after replacing a lamp. Even if you don't replace any lights, headlight aim should be checked. Misalignment of the headlights is one of the most frequent causes of safety inspection failure.

Your owner's manual or service manual should give instructions and a headlight aiming pattern. If not, a flat surface, a blank wall and a roll of tape will suffice until you can get the lights adjusted at a service station. Drive the car up to a wall, then mark precisely where the lights (both bright and dim) shine. Back the car away 25 feet, and with someone in the driver's seat, adjust the lamps until they focus on the marked spots. The aiming adjusters on newer cars can be reached through the outer headlight trim (see picture). Older cars may require removal of the trim to adjust the lights.

Finish your exterior inspection by checking the wiper blades for wear. A blade which streaks the windshield or leaves rubber sticking to the glass is ready for replacement. If the windshield washer seems to lack pressure, remove the reservoir and clean the strainer screen—dirt in the screen often impedes washer flow. Don't forget to check the aim of the washers and top-off the reservoir with the proper solvent mixture.

INSIDE THE CAR

Be sure the heater and defroster work. If the fan fails to operate—look for a blown fuse at the terminal fuse box. Check steering wheel play by turning the wheel slowly until the

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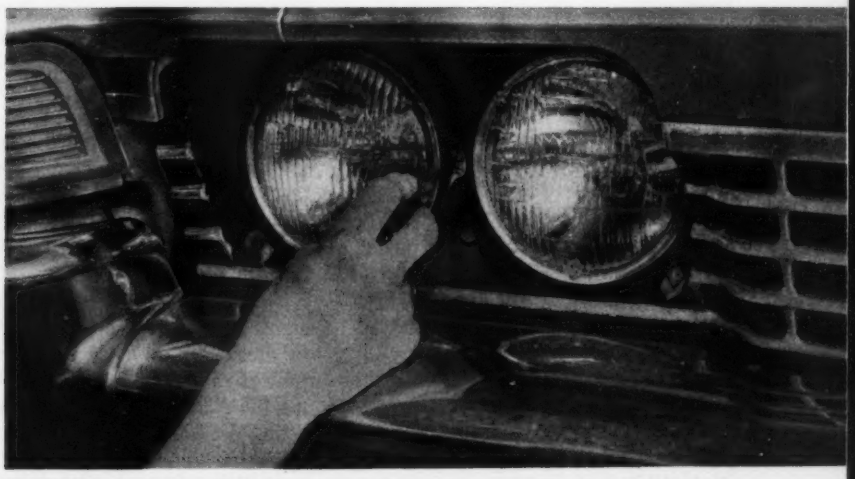
Taillights and back-up lights are easily replaced by removing the outer lens—or, in some cases, they are removed through the trunk. Front parking lights and body side lights are sometimes reached from under the body.



Headlight aiming adjusters can be reached through the headlight trim on newer cars—but most older cars require removal of the outside trim to adjust the headlights.

Hoses and belts are items which cause more car problems than any other parts. Replace hoses that feel mushy, are cracked, or show signs of leaking. Tighten belts that have more than ½-inch of play—if the belt is tight enough, but still squeals or slips, it is probably glazed on the inside—replace it.

The PCV valve is the emission system part most likely to cause problems. Pull it loose from its mounting and shake it—if it doesn't click, replace it. Black oily deposits on the air filter, or rough low-speed operation indicate problems somewhere in the emission system that should be taken care of.

The automatic transmission dip stick (usually located near the fire wall) should be checked frequently. The fluid should be reddish in color—any other color, or fluid that smells like varnish, indicates transmission problems. Check your owner's manual for the correct procedure for checking the fluid level.

front wheels move. There should not be more than 2 inches of free play—if there is, you're probably in need of new tie rods or other steering system repairs. These should be done by a qualified mechanic. Tighten the seat belt mountings, and be sure the seats are fastened securely to their tracks.

If the horn doesn't work, this is the time to fix it. Locate the wire connector at the horn—pull it loose and hook one lead of a test light to a ground. Probe the connector with the other light lead while someone pushes the horn button or ring. If the test light fails to glow, the problem is a faulty relay or switch. Pull the connector at the horn relay (usually located near the front wheel along the inside of the engine compartment) and probe it while someone operates the horn. If the light glows, the relay is bad. If it doesn't, the problem is at the horn switch.

UNDER THE HOOD

Raise the hood and check the cooling system. Replace the radiator and heater hoses if they feel mushy, are cracked, or show signs of leaking. The clamps should be tight, but not so tight they cut into the hoses.

Carefully release any pressure from the radiator, remove the cap and check the coolant level. If the liquid is rusty or discolored, you should flush and replenish the system with the proper antifreeze—coolant mixture. Brown sludge developed around the filler neck may mean you'll need to take your car in for a radiator back-flush.

Replace any drive belt which shows signs of wear. A belt having ½-inch or more of play halfway between the pulleys should be tightened by loosening the component holding it, and exerting pressure to tension the belt. If a pry bar is needed to adjust the belt properly, be sure not to put the end of the bar under anything delicate—such as the outside frame of an alternator or the power steering fluid reservoir.

The battery is an item which should have constant inspection and care—and this is a good opportunity to make sure the battery case is clean and the terminals are corrosion-free, tight, and coated with graphite spray or a light coating of petroleum jelly to inhibit recurring corrosion. Also, check the battery water level.

BRAKE FLUID ESSENTIAL

Be *extremely* cautious of the brake fluid reservoir—low fluid could mean a leak in the brake system . . . and a leak could spell disaster in the form of a brake failure. The fluid reservoir is located with the master cylinder near the fire wall (see picture). If the fluid is not up to the recommended level, check for leaks around the master cylinder and at the brake line connections. Leaks anywhere in the brake system should be taken care of immediately. If you're unsure of where the leak is, or the proper repair procedure, it is best to leave this to a reputable brake shop or mechanic.

The brake fluid reservoir is part of the master cylinder—located near the fire wall opposite the steering wheel. Check the fluid level after cleaning all dirt and gunk from the reservoir top. If the fluid is low, look immediately for leaks in the system.

Brakes are one of the most critical areas for inspection. Brake shoes should have at least 1/32 inch of lining above the rivets, or above the shoes on bonded linings. Disc brakes should also be measured for pad thickness—your owner's manual will give the recommended thickness. Brake drums should be evenly worn and free of large scratches or grooves. Worn drums can be machined and reused, but excessively or unevenly worn drums should be replaced.

EMISSION SYSTEM

Remove your carburetor air filter and look for black, oily deposits—these, as well as rough low-speed idle and operation, indicate problems in the exhaust emission system. A malfunction in the emission system is usually caused by a plugged positive crankcase ventilation (PCV) valve or a damaged hose. Find the PCV valve, usually located in the rocker arm cover or intake manifold (see picture), and shake it—it should click. If not, replace it. Start the engine and hold your finger over the open end of the valve; you should feel a strong suction. If not, check the hose for cracks or kinks.

TRANSMISSION

The automatic transmission is one final area of concern under the hood. Most people wait until shifting problems develop before they even think about the transmission . . . by then it is often too late to avoid expensive repairs. Locate the transmission dipstick, usually hidden behind the engine near the fire wall (see picture). Refer to your owner's manual for the proper procedure for checking the fluid level—this is usually done with the engine warm and idling, and the selector in "Park."

The fluid should have a reddish color; if it is orange or black, or smells like varnish, the shifting bands may be starting to fail. But the problem may still be rectified with proper maintenance. Have your car checked by an expert if you suspect such problems.

SHOCKS

Now you're about to get under the car and into the final but more complicated checks. But before putting the car up on safety stands, check the shock absorbers. All shocks sweat, but excessive fluid on the outside of a shock means it is worn out. Also, if a hard push down on the front or rear of the car produces more than two bounces before the car stabilizes, probably better check into new shocks.

UNDER THE CAR

Carefully jack up the car's front end and place it securely on safety stands—don't forget to chock the rear wheels. If you don't have a buddy helping you, it's a good idea to let someone know you'll be working under the car so they can check on you periodically . . . just in case.

The first thing you'll want to do is trace all the brake lines from the master cylinder to the wheels, looking for fluid leaks. Next, check the transmission, clutch and differential fluid levels by opening the plugs located on the side of the housings. Your owner's manual will show their locations and give lubricant specifications.

Check the exhaust system for leaks by placing your hand around the joints with the engine running (before

continued

Brake lines are another important element of the brake system. Lines should be traced from the master cylinder to the wheels, checking for leaks. The wheel cylinders can be checked for leaks by pulling back on the rubber cups. A leaking wheel cylinder must be rebuilt or replaced.

continued

CHECKING IT OUT

it gets hot). Don't touch the joints; just put your hands in the area. A leak can be felt. Leaking joints can be sealed by tightening the clamps or by covering the joints with a special sealer. Tap the muffler and pipes with a wrench; a dull clank indicates metal ready to rust through and in need of replacement. Do your check of the exhaust system in open air, *never* in a closed garage.

With the wheels off the ground, try to rock each wheel from top to bottom. More than ¼-inch of play may mean a loose or worn wheel bearing. Remove the wheel hub and tighten the lock nut to the correct specifications. If the wheel is still loose, the bearings probably need to be replaced. Excessive play in the wheels, when lifted up from the bottom with a bar or lever, indicates ball joint or king pin problems. If you suspect this, better have the car immediately checked out by a reputable front-end specialist.

BRAKES

The final and probably most important checks are the brakes and tires. With the front wheels removed, disc brakes can be measured for pad thickness. On older cars with drum brakes, you will have to remove the drum to inspect the brake linings. Consult your manual for the proper removal procedure. The drum should be smooth with no large scratches. If the drums are excessively worn, you should take them to a shop for turning. There should be at least 1/32-inch of lining above the rivets on riveted shoes, or above the shoe on bonded linings. If the linings are worn beyond this point, or worn unevenly, you'll need to replace the shoes. Lift up the edge of the rubber cup over the end of the wheel cylinder and check for fluid leakage. If leaking is occurring,you need to have the cylinders rebuilt. Anything appearing unusual during this inspection is reason for a thorough professional brake inspection.

The rear brakes should also be checked. However, rear drum removal may require a special wheel puller. If you don't have the knowledge and equipment for the job, your mechanic can pull the rear drums and inspect the linings for you. Even though the front brakes usually wear first, many people replace only the front shoes when they do a brake job. So, your rear linings may be shot even when your front shoes look new.

TIRES

Tires are always critical—inspect them for tread depth and uneven wear patterns caused by out-of-balance wheels or a misaligned front-end. Unusual wear patterns are a good indication of the need for a trip to a balance and front-end shop. Tires should have at least 2/32-inch of tread at every groove. A good way to check this is inserting a Lincoln-head penny, head first, into the tread. If rubber doesn't at least come to Abe's head, you'd better look for a tire sale. Maintaining proper air pressure is the best way to stretch tire mileage. If you don't have a good tire gauge, you should get one and use it often.

ROAD TEST

If everything has checked out so far, hit the road for a performance analysis and final brake check. Make several "panic stops" in a traffic-free area. Any excessive pulling, noise, or brake fade is reason for an expert brake inspection. You can check brake balance by locking your brakes at 5 mph on a dirt or gravel surface. All four skid marks will be about equal in length if your brakes are balanced.

If your engine's performance is a little down, you might try taking your car to an automotive diagnostic center. A diagnostic test will give you a complete performance rundown, so you'll know exactly what engine parts need adjustment or replacement—and it will confirm the findings of your safety inspection.

LETTERS TO THE EDITOR

BACKFIRE

Address your letters to:
Editor
DRIVER Magazine
AFISC/SEDD
Norton AFB CA 92409

JOYRIDING THE BOW

Betcha half the "Coasties" who read your mag write! This may be Miss DRIVER Cathy Madlin's last appearance with you if she knows as little about boating safety as her pic (Oct 74) indicates.

The equation goes like this: Nice boat, beautiful day, "hot" water skier, plus pretty girl on totally unprotected bow of fast boat equals pretty girl in water in split second. Vibrations, swerve, bump or just plain carelessness equals dunking (if she's lucky) or hit by propeller and/or skier (if she's not lucky).

I've never been with a unit that had to bring back a person chewed by a propeller and I don't ever want to be on such a unit. Please tell your readers that joyriding the bow isn't safe, and ain't always legal, either.

Leif Jenkinson, QM3
USCG Base
Ketchikan, Alaska 99901

WE'RE COMPLIMENTED

The copy of "Backyard Mechanic" you kindly sent at my request arrived today. Someone surely had a happy thought when they conceived of extracting the Backyard Mechanic articles from DRIVER and putting them into one handy volume.

I first ran across DRIVER while in Germany when the Backyard Mechanic series appeared in *Stars and Stripes*. I was impressed with the beautiful writing which made the techniques of auto mechanics so clearly understood and useful to any reader. Moreover, the selection of material was absolutely first class; topics were covered which are surprisingly overlooked by expensive home mechanic books but which are absolutely essential to those of us who do our own work.

When I returned to the United States I was able to subscribe to DRIVER through the Government Printing Office and found it to be one of the brightest, most effective special purpose publications I have seen. Among Service magazines it is perhaps the best. I am quite certain that it is one of those rare publications which enjoys a far wider circulation from hand to hand than its subscription list indicates. Members of all the Services are no doubt better, safer drivers as well as more knowledgeable ones because of its content.

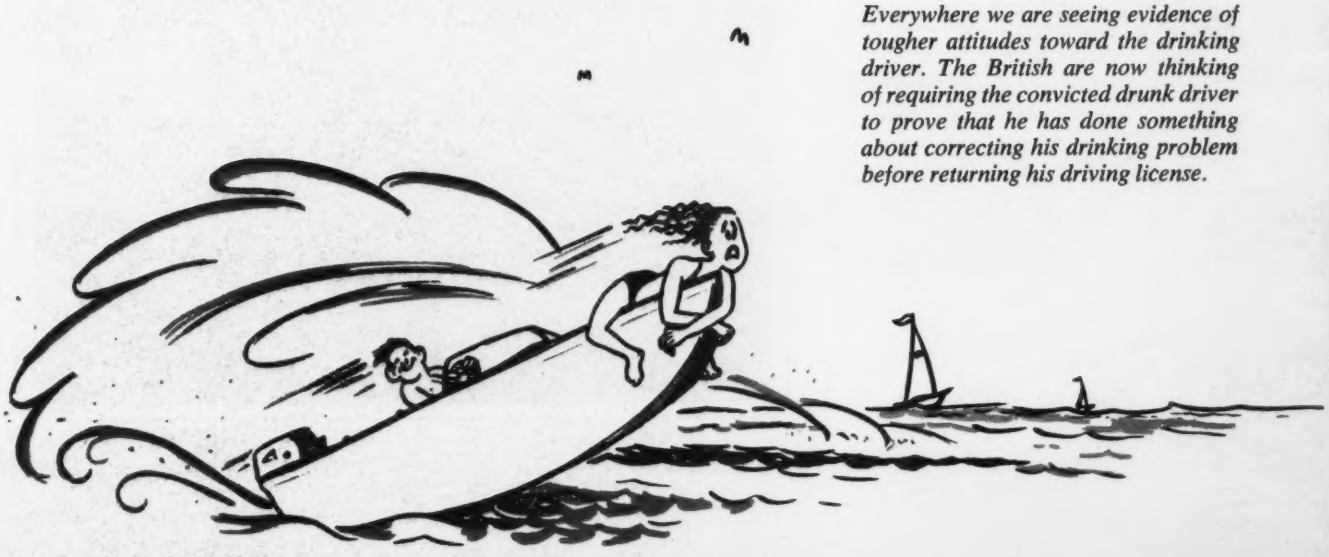
Brig Gen Richard J. Eaton, USA
Alexandria, VA 22310

BLOOD ALCOHOL LEVELS

Your magazine certainly gets my attention every month from cover to cover . . . I've just finished the November issue and wish to make one small correction regarding your article on blood alcohol rates. Recent legislation here in the Netherlands has decreased the rate to .05, keeping in step with Sweden and Norway. I might add it is being strictly enforced.

Maj William H. Schreiber
HQ, AFCENT SUPACT (US)
APO New York 09011

Everywhere we are seeing evidence of tougher attitudes toward the drinking driver. The British are now thinking of requiring the convicted drunk driver to prove that he has done something about correcting his drinking problem before returning his driving license.



REVIEWING THE BASICS

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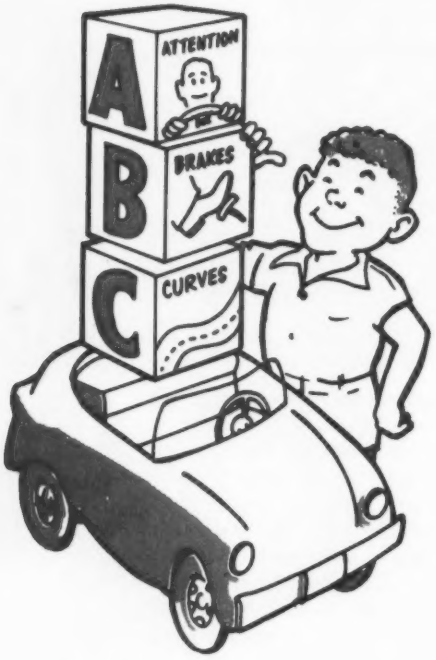

outstanding article I think it is. It is without a doubt the best really short article I've read on the subject. It would seem to me to be an outstanding article to reprint and distribute to beginner driving schools.

LTjg L. P. Wilkinson
USS AINSWORTH
FPO New York 09501

WINTER DRIVING

I just read SSgt A. R. Koester's letter about winter driving in Washington. Although I have never been stationed at McChord,I know his feelings about fast driving, failure to increase following distance, etc., when snow arrives. It seems that people who put snow tires on their cars the first of October think that this makes driving on snow like driving on clear, dry pavement. It doesn't. I have found the only time snow tires are of great advantage is on freshly fallen snow or muddy roads. On hard-packed snow or ice, they don't help at all unless equipped with studs, and even then their effectiveness is not that great.

Something else that people don't realize is that culverts and shady areas are just as dangerous as bridges when it comes to freezing.

I think you people at DRIVER really have your heads in the right place because your articles are interesting, informative, and just plain darn good advice for most people.

SP/5 Ronald S. Ogle
HHC USAARMS
Fort Knox, KY 40121

BUYING A CAR OVERSEAS

In a recent issue, you discussed the purchasing of vehicles while stationed overseas. You mentioned that upon being assigned overseas, you are entitled to have a vehicle shipped over at government expense and that if you do not have one shipped to your new duty station and instead purchase one through the Overseas Exchange auto dealers, the government will ship your newly purchased car at no charge.

I am an E-5 and soon will be transferred to the Philippines. My question is: If I purchase a car over there, will the government ship it to me at no cost?

Thank you for your time, help and fantastic magazine.

Bart T. Macaspac
FPO San Francisco 96601

The arrangement for POV shipping in the Philippines is similar to that in Europe. The answer to your question is yes, if you purchase a U.S.-manufactured car through a franchised dealer connected with the Exchange System, arrangements can be made to ship it to you at no cost by government contracted transport.

ABOUT MISS DRIVER

Blonde Debra Baker keeps busy with college, where she is studying psychology, and spends her free time playing tennis, skiing and swimming. She was Homecoming Princess in high school and we predict she can win any beauty pageants she cares to enter in the future. Debbie has been a licensed driver about six months, is a firm believer in seat belts since the lives of her mother and brothers were saved because they were belted in during serious accidents.

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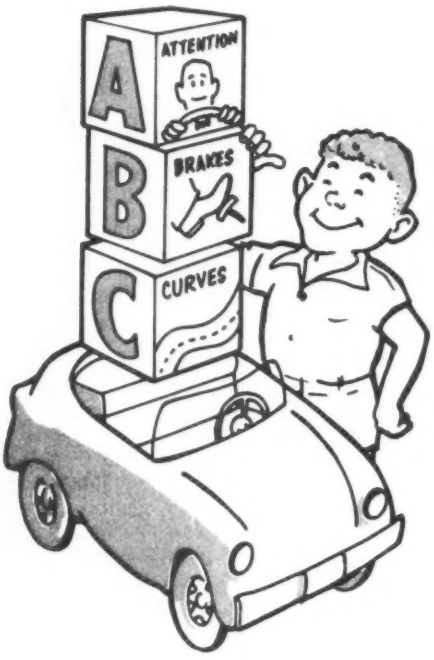

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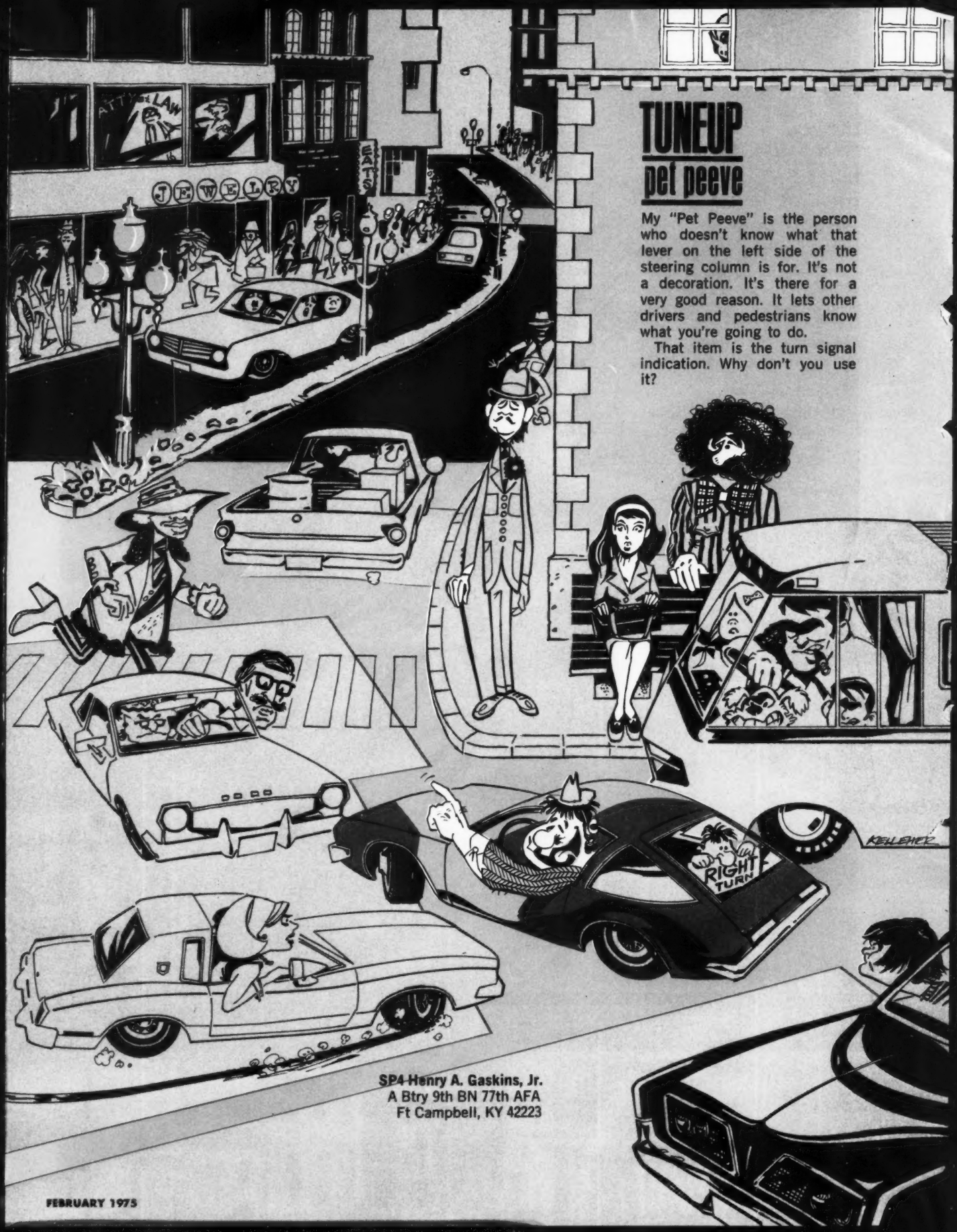

TUNEUP
pet peeve

My "Pet Peeve" is the person who doesn't know what that lever on the left side of the steering column is for. It's not a decoration. It's there for a very good reason. It lets other drivers and pedestrians know what you're going to do.

That item is the turn signal indication. Why don't you use it?

SP4 Henry A. Gaskins, Jr.
A Btry 9th BN 77th AFA
Ft Campbell, KY 42223

miss driver

DEBRA BAKER

"A lot of people think that when the windshield starts to streak it means there's oil or grease on the glass. But this is seldom the case. Most streaking (windshield type) is caused by worn wiper blades, and the experts recommend periodically checking arm tension and replacing blades as soon as they start to streak. It's an easy job and inexpensive if you buy the blades at a discount store. You'll be amazed at how it clears up the picture!"